

REMARKS

The present amendment and remarks are in response to the Non-Final Office Action entered in the above-identified case and mailed on July 20, 2009. Claims 1-20 are pending in the application. Claim 19 was objected to for an underlining and strike-through error in the previously-filed amendment. The appropriate underlining and struck-through text is included in this response. Further, all of claims 1-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,449,715 to Krivoshein (hereafter “Krivoshein”) in view U.S. Patent Application Publication No. 2002/0035621 to Zintel et al. (hereafter “Zintel”). Applicants respectfully traverse.

It is well settled that a claim is not unpatentable under 35 U.S.C. §103 (a) unless each and every element of the claim is taught or suggested by the prior art. In the present case, Krivoshein and Zintel do not teach or suggest every element of any of the claims currently pending in the application. Independent claim 1, for example calls for, among other things, sending a first command from a host system to one of a plurality of process control devices to request a device description identification for the process control device, and receiving the device description identification at the host system from the process control device. Similarly, independent claim 9 calls for, among other things, sending a first command to a first process control device to request the first device description identification, wherein the first device description is used to communicate with the first process control device, and receiving the first device description identification at the host system from the first process control device. Independent claim 14 calls for a software routine stored on a computer to, among other things, request a device description identification from a process control device, and to receive the device description identification process control device from the process control device. Finally, independent claim 19 calls for a computer readable medium on

which computer instructions are stored. When executed by a computer processor, the computer instructions provide, among other things, a communication module operable to request a device description identification associated with one of a plurality of process control devices from the process control device, a storage device operable to receive the device description from the one process control device and store the device description identification, and a search module operable to search for a device description database storing the device description identified by the device description identification. Since neither Krivoshein nor Zintel teach or suggest these features of the claimed invention, the claims, as they presently stand, are not unpatentable over the cited references and should be allowed.

Applying Krivoshein to the rejected claims, the Examiner admits that Krivoshein does not specifically teach sending a first command from the host system to the one of a plurality of process control devices within said plurality of process control devices within said plurality of process control devices to request a device description identification for the process control device; and receiving the device description identification at the host system from the process control device. (Non-Final Office Action, paragraph 7). For these features, the Examiner relies on Zintel. According to the Examiner, Zintel teaches sending a first command from a host system to one of a plurality of process control devices to request a device description identification for the process control device, citing FIGS. 14 and 28 and paragraphs 97, 524 and 554. The Examiner further cites FIGS. 14 and 28 and paragraph 554 as teaching receiving the device description identification at the host system from the process control device.

The Examiner's analysis of Zintel, however, is incorrect. First, Zintel does not teach or suggest a host system sending a first command to a process control device requesting a

device description identification for the process control device. Second, Zintel does not teach or suggest receiving a device description identification at a host system from a process control device. Zintel Fig 14. shows a simple service discovery protocol discovery request sent from a user control point to a controlled device, and a discovery response (URL) sent from the controlled device to the user control point. The user control point can retrieve a description document by issuing an HTTP GET on a description URL. The description URL is returned in the location header of either a Simple Service Discovery Protocol (SSDP) announcement or an SSDP query response. The SSDP discovery request illustrated in Fig. 14 does not correspond to a command sent from a host system to a process control device requesting a device description identification for the process control device. The Simple Service Discovery Protocol is a protocol that enables devices to learn of the existence of potential peer devices and the information (an IP address) needed to establish TCP/IP connections to them. The successful result of an SSDP search is a uniform resource locator (URL). The host name embedded in the URL can be resolved to an IP address that can be used to make a connection to the discovered device (paragraph [0121]). In response to a SSDP search, a universal plug and play device returns description URL in the simple service discovery protocol location and optionally the alternate location SSDP headers.

The SSDP request is not a command to a particular process control device requesting a device description identification from the device, as called for in claim 1, but is rather a multicast request looking for any new controlled devices that have been added to the network. (See paragraph 554, “At response to discovery, the embedded computing device 900 listens to the multi-last address and then parses the information from a simple discovery request to decide if the request is for its kind of device.”) Rather than the user control point specifically commanding a particular process control device to respond to a request for a

device description identification from the process control device, the controlled device receives the multicast request from the user control point and determines for itself whether it is the type of device the user control point is looking for. If so, the device sends back a response packet containing an IP address or URL where it can be reached, identification of its own device type, and the discovery packet ID so the requesting client knows which request is being answered. Thus, the multicast discovery request cannot be considered a command requesting a device description request, but rather a request to locate a particular type of device of the network.

Furthermore, the discovery response (URL) of Zintel Fig. 14, the response to discover of Zintel Fig. 28, the description URL described in Zintel paragraph [0097] and the response packet described in Zintel paragraph [0554] do not correspond to a device description identification as called for in claim 1 of the present application. According to the specification of the present application, a software updating system communicates with a device, such as a field device, to obtain device description identification information identifying the device description needed to communicate with the device. (paragraph [0008]). The device description identification information allows the software updating system to search for the necessary device description on a local device description database within a process plant and if the software updating system cannot find the device description on the local device description database, the software updating system may locate and download the proper device description from an on-line database such as a HART Communication Foundation database, for example, connected to the internet. (Paragraph [0009]). Further, the device description identification provided by the device may contain information such as a manufacturer ID, a device identifier, a device revision, etc. (Paragraph [0026]). In other words, the device description identification information claimed in the

present application allows the host updating system to search for and locate the device description for a particular process control device on various databases either associated with the process plant or external thereto.

The description URL disclosed by Zintel, however, is simply a universal resource locator that always points to a description server located on the controlled device itself. (Zintel, paragraph [0097]). Other than specifying the address at which the device description is located on the controlled device, the description URL does not contain information that would allow a software updating system to locate a device description corresponding to the particular device in a database either associated with a process plant or external to the process plant. Thus, the discovery response (URL) shown in Zintel Fig. 14 does not correspond to a device description identification as called for in the claims of the present application.

With regard to the response to discovery shown in Zintel Fig. 28, Zintel paragraph [0554] describes how the embedded computing device 900 listens to a multicast address and then parses the information from a simple discovery request to decide if the request is for its kind of device. If so, the device then sends back a response packet containing the IP address or URL where it can be reached, identification of its own device type, and the discovery packet ID so the requesting client knows which request is being answered. Although this response to discovery does identify the device type of the embedded computing device, it does not include information about a manufacturer, a device revision number, etc. In other words, the response discovery URL does not provide sufficient identification information to allow a host updating system to search a separate database for a device description corresponding to the embedded computing device. Thus, the response URL disclosed does not correspond to the device description identification called for in the claims of the present application.

As the foregoing analysis shows, neither Krivoshein nor Zintel teach or suggest sending a command from a host system, software routine or communication module to request a device description identification from a process control device. Furthermore, Zintel does not teach or suggest receiving such a device description identification at a host system, software routine or communication module, from a process control device as required by each of the independent claims pending in the application. Because neither Krivoshein nor Zintel teaches or suggests these features of the claimed invention, the claims are not unpatentable over the combined teaching of Krivoshein and Zintel under 35 U.S.C. §103 (a) and should be allowed.

Based on the above arguments applicants respectfully request that the Examiner withdraw the rejection under 35 USC §103(a) and allow the case to issue.

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Respectfully submitted,

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